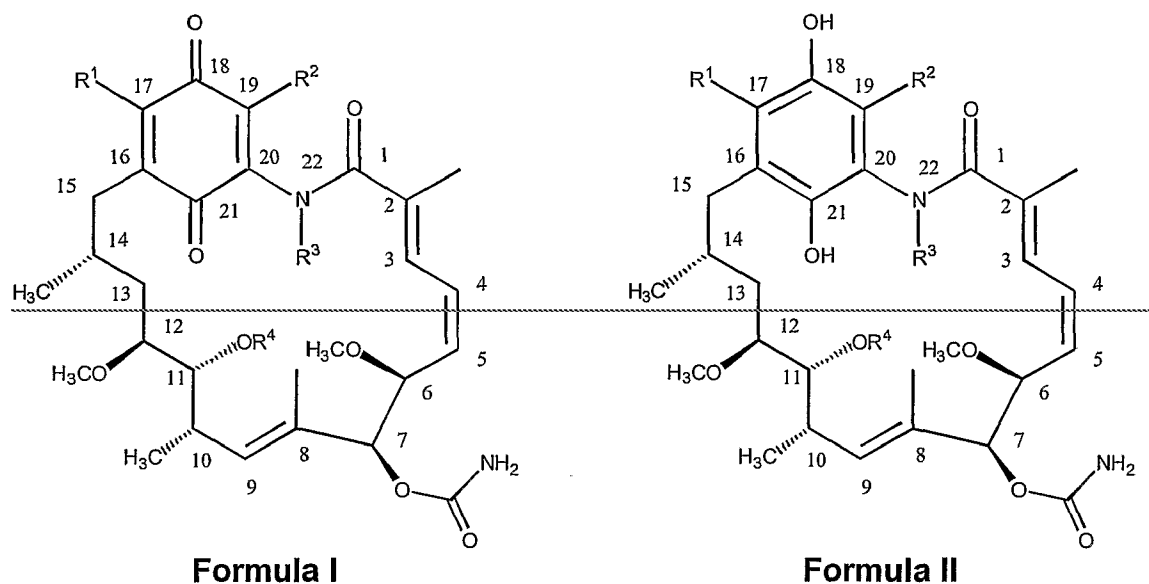


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In the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A compound of 17-N-Aziridinyl-17-demethoxygeldanamycin
~~Formula I or Formula II~~



or a

pharmaceutically acceptable salt thereof;

which has the property of inhibiting the activation of Met by HGF/SF in cancer cells at a concentration below 10^{-11} M, wherein

R^1 is a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or a 3-6 member heterocyclic group that is optionally substituted;

R^2 is H, a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amines; or a 3-6 member heterocyclic group that is optionally substituted;

R^3 is H; a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or wherein the N is a member of a heterocycloalkyl, heterocyclokenyl or heteroaryl ring

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~~that is optionally substituted;~~

~~R⁴ is H; a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or alkynyl;~~
~~and wherein~~

~~the ring double bonds between positions C₂=C₃, C₄=C₅, and C₆=C₇ are optionally~~
~~hydrogenated to single bonds.~~

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

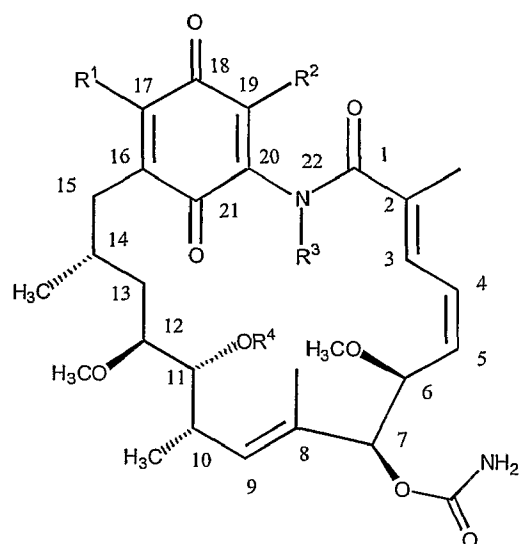
9. (Cancelled)

10. (Currently Amended) A pharmaceutical compositions comprising

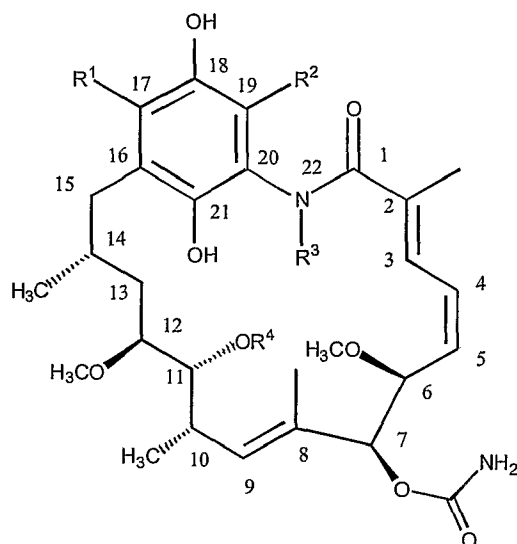
- (a) the compound of claim 1; and
- (b) a pharmaceutically acceptable carrier or excipient.

11. (Currently Amended) A method of inhibiting ~~a~~the HGF/SF-induced, Met receptor mediated biological activity of a Met-bearing tumor or cancer cell, comprising providing to said

cell[[s]] an effective amount of a compound according to claim 1 of Formula I or Formula II



Formula I



Formula II

or a

pharmaceutically acceptable salt thereof;

which compound has an IC_{50} of more than about 10^{-10} M for inhibition of said biological activity, wherein

R^1 is a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or a 3-6 member heterocyclic group that is optionally substituted;

R^2 is H, a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amines; or a 3-6 member heterocyclic group that is optionally substituted;

R^3 is H; a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or wherein the N is a member of a heterocycloalkyl, heterocyclokenyl or heteroaryl ring that is optionally substituted;

R^4 is H; a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or alkynyl, and wherein

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the bonds linking positions C₂ and C₃, C₄ and C₅, and C₈ and C₉ are optionally single bonds.

~~which compound has an IC₅₀ of less than about 10⁻¹³ M for inhibition of said biological activity.~~

12. (Original) The method of claim 11 wherein said biological activity is the induction of uPA activity in said cells.

13. (Original) The method of claim 11 wherein said biological activity is growth or scatter of said cells.

14. (Original) The method of claim 13 wherein said growth of said cells is in vitro.

15. (Original) The method of claim 13 wherein said growth of said cells is in vivo.

16. (Original) The method of claim 11 wherein said biological activity is invasion of said cells.

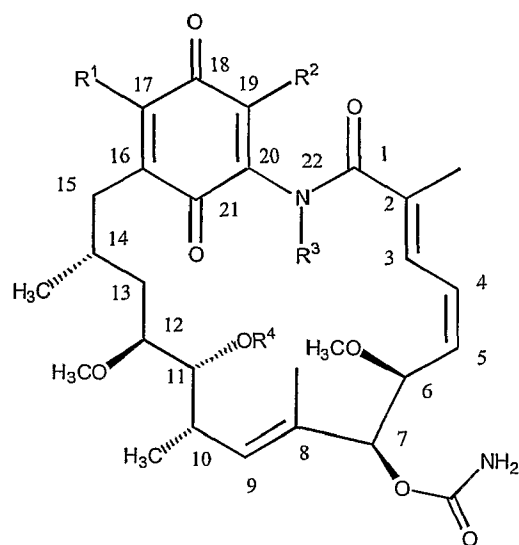
17. (Original) The method of claim 16 wherein said invasion is in vitro.

18. (Original) The method of claim 16 wherein said invasion is in vivo.

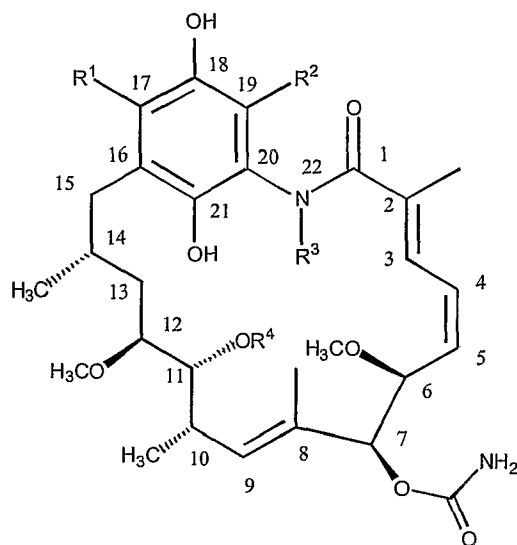
19. (Original) The method of claim 16 wherein said invasion results in tumor metastasis.

20. (Currently Amended) A method of inhibiting in a subject metastasis of Met-bearing tumor or cancer cells that is induced by HGF/SF, comprising providing to said subject an effective amount of a compound ~~according to claim 1, of Formula I or Formula II~~

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Formula I



Formula II

or a

pharmaceutically acceptable salt thereof;

which compound has an IC_{50} of more than about 10^{-10} M of about 10^{-12} M for inhibition of tumor cell invasion when measured in an assay in vitro.

wherein R¹ is a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or a 3-6 member heterocyclic group that is optionally substituted;

R² is H, a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or allynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amines; or a 3-6 member heterocyclic group that is optionally substituted;

R³ is H; a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or wherein the N is a member of a heterocycloalkyl, heterocyclokenyl or heteroaryl ring that is optionally substituted;

R⁴ is H; a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or alkynyl,
and wherein

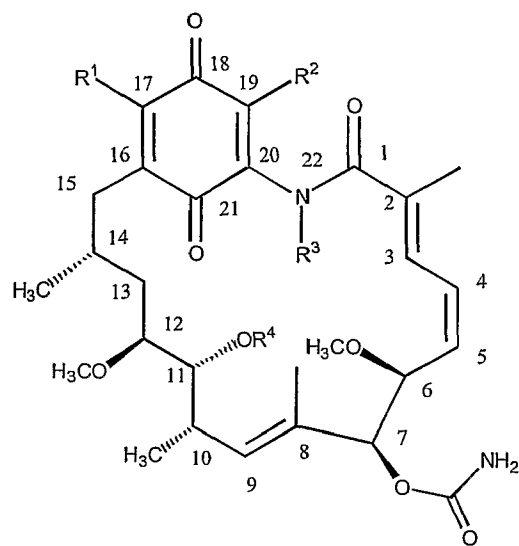
the bonds linking positions C₂ and C₃, C₄ and C₅, and C₈ and C₉ are optionally single
bonds.

21. (Currently Amended) A method of inhibiting in a subject metastasis of Met-bearing tumor or cancer cells that is induced by HGF/SF, comprising providing to said subject an effective amount of a pharmaceutical composition according to claim 10 which composition comprises a chemical compound that has an IC_{50} of ~~less more~~ than about 10^{-12} M- 10^{-10} M for inhibition of tumor cell invasion when measured in an assay in vitro.

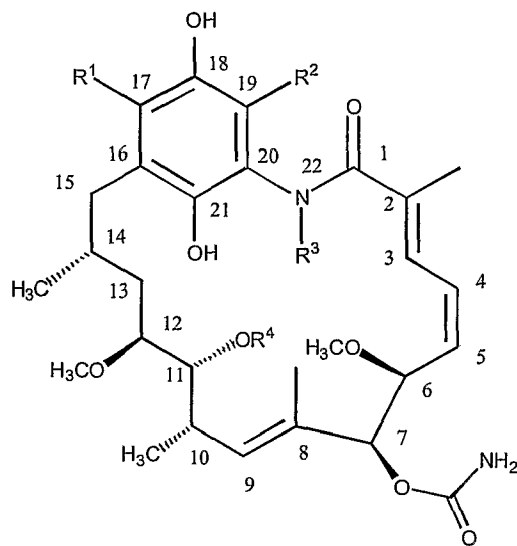
22. (Previously Presented) The method of claim 11 wherein said inhibition results in measurable regression of a tumor caused by said cells or measurable attenuation of tumor growth in said subject.

23. (Currently Amended) A method of protecting against growth or metastasis of a Met-positive tumor in a susceptible subject, comprising administering to said subject who is either

- (a) at risk for development of said tumor, or
- (b) in the case of an already treated subject, at risk for recurrence of said tumor, an effective amount of ~~the compound of claim 1~~ a compound of Formula I or Formula II



Formula I



Formula II

or a

pharmaceutically acceptable salt thereof;

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which compound has an IC₅₀ of more than about 10⁻¹⁰M for inhibiting Met activation of uPA in cancer cells,

wherein R¹ is a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or a 3-6 member heterocyclic group that is optionally substituted;

R² is H, a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amines; or a 3-6 member heterocyclic group that is optionally substituted;

R³ is H; a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or wherein the N is a member of a heterocycloalkyl, heterocyclokenyl or heteroaryl ring that is optionally substituted;

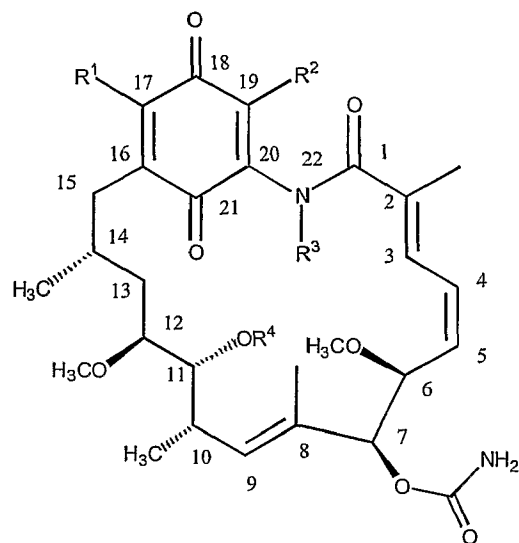
R⁴ is H; a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or alkynyl, and wherein

the bonds linking positions C₂ and C₃, C₄ and C₅, and C₈ and C₉ are optionally single bonds.

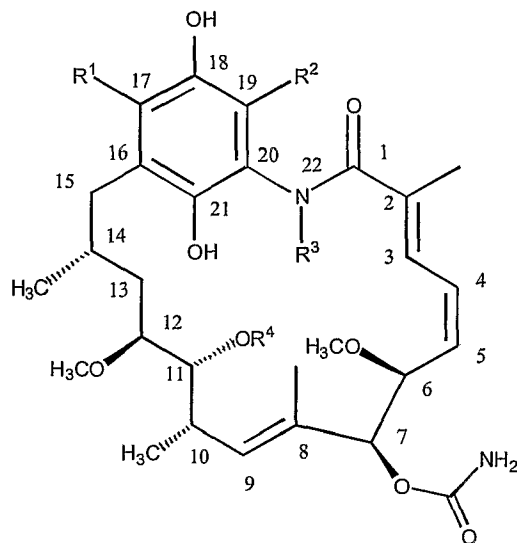
24. (Original) The method of claim 23 wherein the subject is a human.

25. (Currently Amended) A method of inducing an antitumor or anticancer response in a mammal having an HGF-responsive Met-expressing tumor, comprising administering to said mammal an effective amount of ~~the compound of claim 1 to said mammal~~, a compound of Formula I or Formula II

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Formula I



Formula II

or a

pharmaceutically acceptable salt thereof, at a concentration of more than about 10^{-10} M;

wherein R^1 is a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or a 3-6 member heterocyclic group that is optionally substituted;

R^2 is H, a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amines; or a 3-6 member heterocyclic group that is optionally substituted;

R^3 is H; a lower alkyl, alkenyl or alkynyl; a substituted lower alkyl, alkenyl or alkynyl; a lower alkoxy, alkenoxy or alkynoxy; a straight or branched alkylamine, alkenyl amine or alkynyl amine; or wherein the N is a member of a heterocycloalkyl, heterocyclokenyl or heteroaryl ring that is optionally substituted;

R^4 is H; a lower alkyl, alkenyl or alkynyl, a substituted lower alkyl, alkenyl or alkynyl, and wherein

the bonds linking positions C_2 and C_3 , C_4 and C_5 , and C_8 and C_9 are optionally single bonds,

thereby inducing an antitumor or anticancer response which is

(a) a partial response characterized by

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- (i) at least a 50% decrease in the sum of the products of maximal perpendicular diameters of all measurable lesions;
 - (ii) no evidence of new lesions, and
 - (iii) no progression of any preexisting lesions, or
 - (b) a complete response characterized by the disappearance of all evidence of tumor or cancer disease for at least one month.
26. (Original) The method of claim 25 wherein said antitumor or anticancer response is a partial antitumor or anticancer response.
27. (Previously Presented) The method of claim 25 wherein the mammal is a human.
28. (Previously Presented) A compound according to claim 1 which is detectably labeled with a halogen radionuclide.
29. (Original) The compound of claim 28 wherein the radionuclide is bonded to the R¹ group.
30. (Previously Presented) The compound of claim 28 wherein the radionuclide is selected from the group consisting of ¹⁸F, ⁷⁶Br, ¹²³I, ¹²⁴I, and ¹³¹I.
31. (Previously Presented) A method of imaging a tumor in a subject comprising administering an effective amount of a labeled compound according to claim 28, and imaging the detectable label with an imaging means.
32. (New) The method of claim 11 wherein the compound is a benzoquinone of Formula I.
33. (New) The method of claim 11 wherein the compound is a hydroquinone of Formula II.

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34. (New) The method of claim 11 wherein R^1 is a 3-6 member heterocyclic ring in which the heteroatom is N.

35. (New) The method of claim 11 wherein each of R^2 , R^3 and R^4 of the compound is H.

36. (New) The method of claim 11 wherein the compound is selected from the group consisting of:

- (a) 17-(2-Fluoroethyl)amino-17-demethoxygeldanamycin;
- (b) 17-Allylamino-17-demethoxygeldanamycin;
- (c) 17-*N*-Aziridiny-17-demethoxygeldanamycin;
- (d) 17-Amino-17-demethoxygeldanamycin;
- (e) 17-*N*-Azetidiny-17-demethoxygeldanamycin;
- (f) 17-(2-Dimethylaminoethyl)amino-17-demethoxygeldanamycin;
- (g) 17-(2-Chloroethyl)amino-17-demethoxygeldanamycin; and
- (h) Dihydrogeldanamycin.